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(54) Title: POROUS PARTICULATE MATERIAL FOR FLUID TREATMENT, CEMENTITIOUS COMPOSITION AND METHOD OF MANUFACTURE THEREOF

(57) Abstract: A porous particulate material for treating a fluid containing a contaminant is disclosed. The particulate material comprises a cementitious matrix or binder and treated bauxite refinery residue or red mud. At least a portion of the pores in the particulate material is open cell or interconnected pores. The invention also relates to the use of a reactive permeable barrier comprising porous material, for treating a contaminated fluid. Also disclosed is a method for producing porous particulate material for treating a contaminated fluid and a method for treating a contaminated fluid, in which the porous material is used. The invention furthermore relates to a cementitious composition comprising partially neutralised red mud and cement, wherein the partially neutralised red mud has been pre-treated by contacting it with water having a total hardness supplied by calcium, magnesium or a combination thereof, of at least 3.5 millimoles per litre calcium carbonate equivalent. The cementitious composition is useful as a building and construction material.



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